PEEYUSH AGARWAL

Junior Undergraduate Computer Science and Engineering Indian Institute of Technology Kanpur, India Phone (+91) 8953453689
Email peeyusha@iitk.ac.in
Website peeyushagarwal.com
Github github.com/apeeyush

Academic Qualifications

Year	Degree	Institute	CPI
2016*	B.Tech.	Indian Institute of Technology Kanpur	9.3/10
2012	AISSCE (CBSE XII)	Saint Xavier's Sr. Sec. School, Jaipur	91.0%
2010	AISSE (CBSE X)	Saint Xavier's Sr. Sec. School, Jaipur	10/10

^{*}Expected Year of Graduation

Scholastic Achievements

- Secured All India Rank 171 among more than 500,000 students in IIT-JEE 2012
- Secured All India Rank 746 among more than 1,100,000 students in AIEEE 2012
- Awarded Certificate of Merit (Top 1%) by CBSE for outstanding performance in All India Secondary School Examination
- Awarded Kishore Vaigyanik Protsahan Yojana fellowship by Government of India for exceptional aptitude and caliber
- Received Academic Excellence Award for outstanding performance in academics at IIT Kanpur
- Secured 1st position in 5th Rajasthan State Level UCMAS Abacus and Mental Arithmetic Competition
- Secured 8th position in 7th All India UCMAS Abacus and Mental Arithmetic Competition

Work Experience

Software Developer

Google Summer of Code

May 2014 - Aug 2014

Designed and developed Data Analytics Log Manager, a platform for detailed user level data analytics. It provides

- An API for receiving log data consisting of arbitrary key value pairs
- Tools to filter, analyze and visualize this data
- Capability to create a parent-child relationship and add synthetic/computed data
- Intuitive interface, thus enabling use by field experts (who may not have prior programming experience)
- Authentication and authorization to help protect the data

Co-Founder and Technical Lead

Manaple Technologies

Nov 2013 - Mar 2014

Built a customer engagement platform for retailers which consists of

- A web app (optimized for tablets) to collect customer feedback and contact details
- Functionality to send SMS and emails to customers for targeted campaigns
- Different access levels from store staff to store owner and analytics of data collected from customers

Projects

progCloud

Computing Laboratory

Aug 2014 - Nov 2014

Designed and implemented a cloud based data storage service consisting of a web interface and a python client

- Web interface allows users to create/upload files and folders and share them with other registered users
- Python client provides two way synchronization where latest changes are both pulled from and pushed to the cloud
- Designed a network protocol for communication between client and server to increase flexibility
- Made it production ready by ensuring robustness and security (Service to be launched for use within university)

Extended NachOS

Operating Systems

Aug 2014 - Nov 2014

- Implemented system calls pertaining to Fork, Exec, Join, Yield, Sleep and Exit
- Implemented UNIX, First in First Out, Round Robin, Shortest Job First and Non-Preemptive job scheduling algorithms
- Implemented Random, First in First Out, Least Recently Used (LRU) and LRU Clock page replacement algorithms

Content Aware Mail Classifier

Programming Club, IIT Kanpur

May 2013 - Jun 2013

Created a mail classifier based on bag of words model using publicly available Enron mail database

- Studied and implemented various supervised learning algorithms like Multiclass-SVM, Naive Bayes and Random forests
- Used basic Natural Language Processing techniques like POS-tagging and stemming
- Built the main testing and classification module using python, python-nltk, scikit-learn and weka
- Also built a prototype for Gmail using Google App script

Moody Trudes! Yahoo!'s R&D Team Aug 2013

Online Medical Store Open Source Project Dec 2013

Built a store consisting of Products Maintenance System, Catalog, Cart and Check Out System using Ruby on Rails

Eduvate Open Source Project Mar 2014

Built an educational web app to help children master a language faster. The app displays a word randomly and analyzes user's pronunciation of the word using Google's Speech2Text API; Also tells the correct pronunciation for the word

Technical Skills

Programming Languages C++, Python, C, Ruby, Shell Scripting, Perl, MySQL

Web Development HTML, CSS, JavaScript, Ruby on Rails, Django, jQuery, KnockoutJS, Bootstrap, RSpec

Tools GIT, Latex, Octave, Weka

Cloud Platforms AWS, Heroku

Relevant Courses

Fundamentals of Computing Data Structures and Algorithms Computer Organization Discrete Mathematics
Computing Laboratory Introduction to Logic Abstract Algebra Machine Learning
Operating Systems Advanced Algorithms Computer Networks Theory of Computation
Compiler Design* Artificial Intelligence* Database Systems*

*Ongoing

Positions of Responsibility

Executive, Public Relations, Techkriti'14

- Led a team of more than 20 volunteers to organize talks, shows and exhibitions in the biggest festival at IIT Kanpur
- Organized Pre-Fest talks by Dr. Hans Rosling and Wing Commander Rakesh Sharma for the first time in campus
- Hosted 11 guest lectures, 13 exhibitions and 6 technical shows from 8 different countries

Coordinator, Computing Events, Techkriti'14

- Designed and tested problem statements for programming events with prize money worth \$4000
- Invited experts for evaluating competitions and ensured smooth execution of competitions and workshops

Mentor, Association of Computing Activities, IIT Kanpur

- Mentored Computer Science students and introduced them to Linux and Web Development
- Organized sessions to teach computer science basics and assisted them in building an online store